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## Facsimile

Date: May 19, 2003  
Deliver To: John Vigushin (GAU 2827)  
Fax: 703-746-4343  
Re: Serial No. 10/002,732 (docket no. P012-1)  
From: David M. Sigmond

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The following documents are attached:

1. Second Preliminary Amendment (5 pages)
2. Markstein et al. (6 pages) (Ref AP, PTO-1449, p1)
3. Elenius (3 pages) (Ref AQ, PTO-1449, p1)
4. Erickson (3 pages) (Ref AP, PTO-1449, p2)
5. Kuchenmeister et al. (5 pages) (Ref AQ, PTO-1449, p2)
6. Ghaffarian (4 pages) (Ref AP, PTO-1449, p3)

Please note the references are complete (and identical to the original submissions).  
The skipped pages are advertisements.

Please let me know if I can assist further.

TOTAL NUMBER OF PAGES: 27 (Including This Page)  
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David M. Sigmond at (303) 554-8371

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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Charles W.C. Lin  
Title: SUPPORT CIRCUIT WITH A TAPERED THROUGH-HOLE  
FOR A SEMICONDUCTOR CHIP ASSEMBLY  
Serial No.: 10/002,732 Filed: November 15, 2001  
Examiner: Vigushin, J. Group Art Unit: 2827  
Atty. Docket No.: P012-1

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COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, VA 22313-1450

**SECOND PRELIMINARY AMENDMENT**

Dear Sir:

Please amend the application as follows.

**In the Abstract**

Replace the paragraph at page 35, lines 1-19 with the following paragraph:

A support circuit is adapted to be mechanically and electrically coupled to a semiconductor chip such that the support circuit and the chip in combination form a semiconductor chip assembly. The support circuit includes an insulative base and a conductive trace embedded in the insulative base. The conductive trace is a single continuous piece of metal, the conductive trace includes a pillar that extends above the insulative base and a routing line that is substantially covered by and extends below the insulative base, and an opening in the routing line has tapered sidewalls and a diameter that increases as height increases.